Name: Rachel Fischhoff Grade: 5 Date: February 13, 2012

Jumping Buddies Day Two

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| Lesson Sources: California Frog-Jumping Contest, Jacob and Fosnot |
| Lesson Objectives: Students will complete the worksheet Appendix D and clarify their thinking as they transfer their findings to posters to share. |
| Standards: |
| Multicultural Content: |
| Materials and Advanced Preparation: poster making materials |
| Prior Knowledge and Skills Needed: work from investigation, sentence stems |
| Key/New Vocabulary:  representations—numerical expression, visual, in words  accuracy: clear and mathematically true |

Lesson Procedure: Part One

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| **Time** | **Teacher Actions** | **Student Learning Activities** | **Form of Assessment** |
| 1 min | **1. Connection**   * Mathematicians, last week you began looking at the Jumping Buddies—Frog and Toad. You did some investigating to find out more about each creature’s jumps. Today we will continue thinking about these friends are similar and how they different. * Your job today is to clarify your thinking and represent your findings by creating a poster. | Explain purpose of mini-lesson |  |
| 10 min max | **2. The Teaching (The Giving of Information):**   * Before we begin, let’s review some of what we learned last week (Esterlyn/D’Angelo, Lesley/Jashon). * Look at the double number lines and point out one that is *accurate—*meaning it shows the relationship in a way that is clear and mathematically true. * When you create your posters today, you will be representing your findings in *three ways—*with a picture (a visual representation), in full sentences (with words), and with numbers (a numerical representation). * Watch while I represent some of what I know about Frog in three ways * Draw a number line with two jumps, write “My number line shows that two of Frog’s jumps are equivalent to 24 steps”, then write a number sentence like 2(12)=24 \*special note that putting something in parenthesis next to something else is the same as writing 2 x 12 = 24. | * Active listening   On Friday afternoon, I made a chart to use for today’s lesson. Feel free to use it, or make your own. Also, feel free to write on mine. I left some info off to be added during the lesson.  Take your time with them with this, and tell them they will share at the end. | * Have students say back information, or help me build my multiple representations. |
|  | **4. The Link**   * Today you will be working in partnership to develop a poster that shows what you know about the jumping buddies and answers the last question on the worksheet—“Where do frog and toad both land? Clearly 96 is one answer. Are there other places where they both land?” | **(Workshop Time)**   * Complete worksheet * Create poster * Use sentence language stems | * How will you know what strategy or teaching students are applying? * What will you record during the conferencing? * Which students will you conference with today? |
|  | **5. Closing (at the share)**   * Have a few partnerships share. * Concentrate on how they represented equivalency, how equivalent relationships helped them find common meeting spots. * Consider the distance between the common meeting spots—why are they equally spaced? | * Select students to share | * How will you assess the application of the concept during the workshop time? * How will you communicate to the students what they accomplished today? |
| **Anticipated Responses/Outcomes:**   * Some students will need language stems, for example: * My double number line shows that \_\_\_\_ of Frog’s jumps are equivalent to \_\_\_\_of Toad’s jumps. I know that Frog and Toad will meet at \_\_\_\_because \_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_   Yes, this is fine. Keep it simple, and accurate. I want them to have strong scaffolding for their math writing. We will need to be heavy handed throughout the unit, which is fine.   * Or something like that… | | | |

**Reflections:**

How did the lesson plan work? What was effective? What did you learn? What would you change for tomorrow or the next time you will use this plan?